

August 11, 2016

To: John Colletti; USEPA Region 5

From: Philip Livingston; Bad River Water/Sewer Manager

RE: Flooding events on July 11, 2016

Monday night on 7-11-16 the New Odanah area received a heavy amount of rain in a relatively short period of time. By 6pm on 7-11-16 New Odanah already had over 1 inch of rainfall total, and from 6pm to 7 pm an additional 2.5 inches of rain fell. The heavy rain continued until 3:30 am on 7-12-16 and light to moderate rain fall until 4:30 am on 7-12-16. Because of this amount of rain in a relatively short period of time and because of the large amount of rain that fell prior, northwest of Odanah, the Denomie Creek overflowed and flooded in many areas, including the area (Northeast) that the Creek runs along the Bad River WWTP. The rain caused flash flooding. I arrived at lift station #2, that pumps to the Bad River WWTP around 8 pm on 7-11-16 and verified that both pumps were operational but had a high level alarm. At about 10:30 pm I realized that lift station #2 pumps could not keep up with the incoming water. By morning on 7-12-16 lift Station#2 was roughly 1.5 feet underwater. At about 10:30am on 7-12-16 lift station #2 wet well was back to normal level.

Around 11pm on 7-11-16 I went to the WWTP while my operators went to Franks Field to check on the Franks Field Lift Station because there was a power failure in that area. I had to adjust the controls of the SBR tanks and EQ basins to handle the large amount of influent coming into the Plant. At about 11:30 pm the entire WWTP building parking lot was covered in 2 feet of water from the Denomie Creek and soon after rose to 3.5 feet. Water came into the WWTP building. I called the Wisconsin State Office of Emergency Management hotline and talked to the on-call WIDNR officer, Jeremy, of the situation. At this time the WWTP was taking on a lot of water and He told me to leave and get to a safe area. I told him it was too late to leave because the water was too high to use any roads. He told me to call the local dispatch, Ashland County Sheriff, and ask for help. I proceeded to call Ashland Co. dispatch and they sent Bad River Fire Dept to get me but got pushed by the water into the ditch in front of the WWTP building. I tried to block the water from getting too high and put the computers for the PLC, SBR controls on tables and chairs so the plant could still be operational and I could monitor and control the plant and SCADA. I keep the Plant running and treating the influent best I could but had to shorten the cycles to handle the wastewater. There was never a breach or spill. In a 36 hour period, 400,000 gallons

of influent enter the plant, when the normal day is 50,000 gallons. I stayed the whole night and into the morning, when I was able to leave after the water resided I check the collection system and drinking water distribution system because there is force main and water main that goes under the Denomie Creek where the creek washed out the bridge on US HWY 2. I verified the water pressure first than had the guys turn on the Lift Station in Franks Field that feeds the force main and opened first man hole after the bridge where it goes to gravity and it was flowing good. I call John Colletti that afternoon, July 12, 2016 but did not leave a message. I contacted him on 7-15-16 to recap the mess. I will attach a graph of the time period mentioned above that can illustrated the treatment of the wastewater and the level of aeration and levels of the SBR tanks. Please feel free to contact if any questions

Philip Livingston